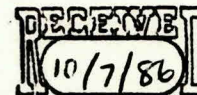




COMMONWEALTH OF PUERTO RICO / OFFICE OF THE GOVERNOR

Environmental
Quality Board



September 22, 1986

Mr. Barry Tornick
Caribbean Permit Section
US Environmental Protection
Agency - Region II
26 Federal Plaza
New York, New York 10278

RE: Eli Lilly's Part B
NOD (PRD091024786)

Dear mister Tornick:

Enclosed please find Eli Lilly's NOD for their Part B,
Administrative Review. These comments are the results of our
review to the company's response to our April 28, 1986 NOD.

In the event of having any comments, please contact
Eng. Raquel G. Cortés of my staff at (809)722-5453.

Cordially,

par Intendente Jesús

Carlos R. Vázquez, esq.
Director
Land Pollution Control Area

/eas

Enclosure

cc: Mr. John Gorman
US EPA - Region II

September 22, 1986

M E M O R A N D U M

TO : Carlos R. Vázquez, esq. *[Signature]*
Director
Land Pollution Control Area

THROUGH: *[Signature]* Mr. *[Signature]*
Acting Chief
Permits & Engineering Section

FROM : Olga Avilés *[Signature]*
Environmental Specialist

: Miguel Manzanares *[Signature]*
Chemical Engineer

SUBJECT: Eli Lilly Industries Inc.
Mayaguez Plant
PRD091024786

On August 4, 1986, we received Eli Lilly's response to our April 28, 1986 N.O.D.. After having evaluated the submitted information we still find it to be incomplete and/or deficient.

Attached you will find copy of our re-evaluation for the new submitted information.

/eas

Enclosure

Administrative Review Comment Sheet

RE: Eli Lilly Industries Inc.
EPA ID No. PRD000691014

After reviewing the Revised Part B Permit Application, the following was found to be missing and/or incomplete:

B2 - Topographic Map

- 1) We are still not satisfied with your response. You have stated that a 1:200 scale will not show the surrounding area beyond the plant boundaries. We can not understand how you determine this. When making a map of smaller scale you are doing two things; first, you will have better contours or detail of the surface area and two, you will need a larger paper area to represent the same area that was in a 1:20,000 scale. In figure B-1 you have submitted a 1:750 scale map, this is only a blow up of a 1:20,000 topographic map. Apparently you must have misunderstood our original question, because we did not ask for a blow up, instead what we are looking for, is that you make your own 1:200 scale map with the surrounding area.
- 3) As mention in question #1, our same response apply to this answer.
- 6) Concerning the presented wind rose diagram, apparently you have committed an error in representing wind direction. All wind direction should be going away from the center of the wind rose. Please correct this error.
- 7) For the storm sewer and sanitary system, apparently there is a direct connection between the hazardous facility (Incinerator, Drum Storage Area and Tanks). Because of this, additional detailed, information and blue print (for the specific hazardous waste facility) must be submitted. Having special care in describing the potential of any hazardous waste coming from the regulated unit, reaching the Río Grande de Añasco by your storm sewer and sanitary system.

C-2C Sampling

- 1) The company must address in the waste analysis plan the number of samples to be obtained in the tank during the sampling activities. All samples must be proven to be representative.
- 2 (a) You must include the criteria used for the preservation and handling of all samples.

C-2F Additional Requirements for Ignitable, Reactive or Incompatible Waste

You must describe the procedures to verify the compatibility of the waste with the tank and also provide documentation that supports the compatibility demonstration.

D-2(a): Description of Tank:

Even though our question has been answered, your response must be made part of the Part B documents and not a separate document.

F-1a(1): Types of Problems

As in D2(a) you must resubmit your response as part of your Part B Documentation.

F-2(d): Inspection Log (Hazardous Waste Containers)

The following information must be included as part of the Inspection log book:

(I) For the Hazardous Waste Storage Area:

- (a) Date of Inspection
- (b) Name of Inspector
- (c) Time of Inspection
- (d) If corrective action is required, date and describe the nature of remedial action.

(II) For the Hazardous Waste Incinerator

- (a) Name of the Inspector

F-4(e): Personnel Protection Equipment:

Provide in detail the criteria used to determine when and which type of equipment will be used by the personnel, during the management of hazardous waste.

1-1(d): Inventory Disposal, Removal or Decontamination of Equipment:

Provide information and demonstrate that the waste water treatment facility has the capability to treat the additional Hazardous Wastewater generated during the closure activities. If you are planning to treat contaminated soils in your liquid incinerator you must demonstrate the capability of the incinerator to do this function.

Comments of the Incinerator Trial Burn Plan

- 1) Specify with which type of indicator or method will be utilized to measure the combustion gas velocity.
- 2) Where will the "low temperature thermocouple" be located (this is the one connected to the automatic shut off system).
- 3) You must specify if the monitors used for; feed rate, waste feed rate, low temperature and CO₂, will be equipped with strip charts to record the information.
- 4) Eli Lilly must provide the most recent chemical analysis of the primary, secondary and supplemental feed material used for the incinerator.
- 5) Provide the manufactures burner specifications. How is the waste feed atomized? Specify if the particle size of the ashes is compatible with the burner nozzle diameter?
- 6) Calculate emission rates for particles, HCl and POHC, before and after packed tower. Substantiate the means in which the emission rates were determined.
- 7) Provide the design specification for the control equipment (packed tower). Data to be part of your response must include pH, percent solids recirculated in water, water flow rate, flue gas temperature, cross sectional area, packed height and flue gas composition.

- 8) At what carbon monoxide (CO) level will the trial burn be conducted?
- 9) A test of the automatic waste feed cut-off system must be conducted during the trial burn testing period. At a minimum, test should be individually conducted for high waste feed rate (primary and secondary) low combustion temperature, high CO and high combustion gas velocity.
- 10) Please include the process and instrumentation (P and I) diagram.
- 11) Eli Lilly must submit a revised testing protocol before the approval of this test burn. The revised protocol must include at least the following:
- a) Diagrams of proposed sampling locations along with distances from upstream and downstream disturbances must be submitted.
 - b) Proposed number of sampling points, sampling point locations and sampling durations at each point must be submitted.
 - c) Calibration data for all equipment used in the test program must be submitted.
 - d) Calibration data of the waste feed system, combustion temperature sensors, and other pertinent process monitoring devices must be submitted.
 - e) The determination of the presence or absence of cyclonic flow at the proposed stack sampling location must be conducted.
 - f) A diagram showing the exact location of the CO probes is required.
 - g) An integrated multipoint stack gas sample must be for each particulate test run and analyzed for %O₂, %CO₂ in accordance with EPA Reference Method 3. The sampling run must be conducted simultaneously with and for the same duration as the particulate emission rate test run.

h) A carbon monoxide (CO) continuous emission monitoring (CEM) system must be installed so that representative measurements of CO are obtained. The CO CEM must be installed and evaluated according to Proposed Performance Specification 4, Appendix B, 40 CFR Part 60. The Performance Specification Test results must be submitted for review prior to the test burn program.

i) Concurrent with each particulate/HCl and POHC sampling run, determinations of stack gas velocity pressure, static pressure, temperature, dry molecular weight, percent moisture and barometric pressure must be conducted in accordance with EPA reference methods 1-4.

j) Eli Lilly must verify that POHC break through, does not occur during the VOST sample runs.

12) If the gas streams are saturated or laden with water droplets, two calculations of the moisture content of the stack gas must be made, one from EPA Reference Method 4 gravimetric impinger analysis and a second based on the assumption of saturated conditions. The lower of the two values is considered correct.

13) One composite sample of each waste feed stream be taken per test run. Each sample must consist of grab sample at fifteen minute intervals. Waste feed sample must be analyzed for at least the following parameters: heating value, viscosity, density, percent moisture, ash content, quantity of POHC, and quantity of organically bound chlorine.

14) Specific methods of analysis and associated quality assurance/quality control (QA/QC) activities for feed analyses needs further informations to wit:

a) Actual practice regarding specific criteria for data acceptance, rejections, and qualifications based on precision, accuracy, holding time, etc.

b) Minimum requirements regarding educations, experience, and training of personnel involved in analytical activities.